

**METHOD AND SYSTEM FOR PERFORMING  
A CDMA SOFT HANDOFF**

**Abstract**

Disclosed is a method and system for performing a handoff in a wireless communication system including receiving a communications signal from a mobile unit. The communications signal includes a phase offset from a pilot signal from one of the neighboring base station transceivers. A handoff process to one of the neighboring base station transceivers is then initiated and an ambiguity is detected by determining whether the phase offset from the pilot signal is in two neighbor search windows for two neighboring base station transceivers. If the ambiguity is detected, the search window for an active set of neighboring base station transceivers is widened so that the mobile unit can identify the pilot signal with the correct base station transceiver. If the ambiguity is detected, the hand off process is paused until the mobile unit can analyze all of the pilot signals from the neighboring base stations.